

# Energy Conservation: MCG -- No. 507834

Category  
Agency  
Planning Area  
Relocation Impact

General Government  
Public Works & Transportation  
Countywide  
None

Date Last Modified  
Required Adequate Public Facility

January 6, 2006  
NO

## EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY05	Est. FY06	Total 6 Years	FY07	FY08	FY09	FY10	FY11	FY12	Beyond 6 Years
Planning, Design and Supervision	270	0	0	270	45	45	45	45	45	45	0
Land											
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	1,530	0	450	1,080	180	180	180	180	180	180	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	1,800	0	450	1,350	225	225	225	225	225	225	*

## FUNDING SCHEDULE (\$000)

G.O. Bonds	1,735	0	385	1,350	225	225	225	225	225	225	0
Current Revenue: General	65	0	65	0	0	0	0	0	0	0	0

## ANNUAL OPERATING BUDGET IMPACT (\$000)

Maintenance				-168	-8	-16	-24	-32	-40	-48	0
Energy				-777	-37	-74	-111	-148	-185	-222	0
Net Impact				-945	-45	-90	-135	-180	-225	-270	0

## DESCRIPTION

This program provides for profitable energy conservation retrofits in County-owned buildings. Retrofits to lighting systems, building envelopes, heating and cooling controls, and boiler efficiency upgrades are provided through this project. A central Energy Management and Control System (EMS) has been installed to monitor major buildings. Energy audits have been conducted to identify and prioritize energy conservation projects throughout the 35 largest buildings. Advanced energy-saving technologies are introduced into County facilities as they become economical and reliable. Retrofits are performed during off hours and do not disrupt services at affected buildings. For new construction and renovation projects, energy design guidance is provided to contractors, and energy budgets are developed and enforced. Utility costs for County facilities are monitored in a computer database. Emphasis during FY07-12 will shift from the completed lighting retrofit program (payback within three years) to the next most profitable energy "target": replacing/upgrading/adding Energy Management Systems (EMS) in County facilities (payback within five years).

## JUSTIFICATION

This program is part of the County's cost-containment program. The projects pay for themselves in a short time, generally one to five years. The County then continues to benefit for many years through lower utility costs. The program is environmentally responsible in reducing the need for utility power plants and decreasing greenhouse gas emissions. The project fulfills the County's voluntary commitment to reduce energy use in all its buildings under the EPA Energy Star Buildings Program. The project is necessary to fulfill the mandate of Montgomery County Code Section 8-14A, Building Energy Design Standards. Improvements in lighting and HVAC controls also improve employee comfort and productivity. Major retrofits of these energy technologies will be made at all County facilities not presently scheduled for renovation. Future maintenance costs are also reduced.

## Plans and Studies

The March 2005, "report of the infrastructure maintenance task force" identified the current, and growing, infrastructure need to replace/upgrade/add Energy Management Systems (EMS) as a means to not only preserve and maintain the county's infrastructure, but also, as a means to continue profitable energy conservation measures. A facility condition assessment of 24 County facilities completed by a consultant in FY05 has been used to prioritize the six year program of energy conservation retrofits.

## Cost Change

Increase due to the addition of FY11-12 to this ongoing project.

## STATUS

Ongoing.

## OTHER

\* Expenditures will continue indefinitely.

## APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY78	(\$000)
Initial Cost Estimate		320
First Cost Estimate		
Current Scope	FY07	1,800
Last FY's Cost Estimate		1,623
Present Cost Estimate		1,800

Appropriation Request	FY07	225
Appropriation Request Est.	FY08	225
Supplemental Appropriation Request	FY06	0
Transfer		0

Cumulative Appropriation		450
Expenditures/ Encumbrances		259
Unencumbered Balance		191

Partial Closeout Thru	FY04	8,941
New Partial Closeout	FY05	272
Total Partial Closeout		9,213

## COORDINATION

Energy Conservation Work Program - Energy Star Upgrades  
Department of Public Works and Transportation,  
Division of Capital Development and Division of Operations

## MAP

